Letting Go of "Once and for All"

Research is about discovery. Sometimes, if we let it, research can shake our core beliefs

THAT WAS THE CASE FOR ME IN 1988, WHEN I WAS INVITED to do some work for the Construction Industry Institute (CII), a research consortium of top American companies and universities.

I had come to CII's attention because of my work regarding project planning. To continue my research, CII made it possible for me to interview 39 project managers at 11 companies. I asked each manager a series of questions about planning at the early phase of a project. Rather than confirming what I expected to hear, out of this process came something I didn't understand. Again and again, the managers I spoke with told me that they searched for potential solutions, i.e. they started engineering designs, before they finalized their project objectives.

"Objectives first, means second." Define the problem, then solve it. That is what I had been taught as a student, and that is what I had subsequently taught to my students. But top-notch managers at well-respected companies were telling me that they didn't work that way. In almost all my interviews, I observed the same discrepancy. The objective formation process is not an isolated activity, and it is not completed before searching for alternatives begins.

This astonished me or, to be honest, it shocked me. For a couple of months, I wrestled with what I had heard. My wife and children have told me that it was clear to everyone around me that something was bothering me. We lived in a duplex, and after my neighbor heard me pacing back and forth, night after night, he asked if there was something wrong with me.

Because I had conducted my research accepting the prevailing assumption (objectives before means), I hadn't phrased my questions in a way that could directly disprove the assumption. Instead, my conclusions had to be derived indirectly from my data, and this added to my feeling of unease about the validity of my findings.

It took me a long time before I fully understood what I had observed, and it required a lot of reinforcement. As I went back through the literature and re-read pioneering works by highly respected researchers like James March, Donald Schon and James Thompson, I found support for my new understanding of project planning. As March wrote, "The argument that goal development and choice are independent behaviorally seems clearly false. It seems to me perfectly obvious that a description that assumes goals come first and action comes later is frequently radically wrong."

It took me a long time before I fully understood what I had observed, and it required a lot of reinforcement.

The old paradigm assumed implicitly that a manager first reduces all uncertainty of objectives, and only then begins to develop the plans or means to accomplish those objectives. But experienced project managers were telling me that they simultaneously reduced the uncertainty of both objectives and means. My findings showed that in most capital projects, not only is "means uncertainty" (how to do it) resolved late in project life, but so is "end uncertainty" (what to do).

So, my research led me to formulate a new paradigm. Under conditions of uncertainty, it is impossible to finalize project objectives at the outset once and for all. Rather, in order to set stable project objectives, one must sometimes first explore the means. That is what I learned.

We can learn much from research—but very often we need to be willing to engage in a little unlearning first. •